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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/580,583	05/30/2000	Toni Kopra	017.38081X00	8331
38879	7590	03/09/2004	EXAMINER	
DARBY & DARBY P.C. P.O. BOX 5257 NEW YORK, NY 10150-6257			GRAVINI, STEPHEN MICHAEL	
			ART UNIT	PAPER NUMBER

3622

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/580,583

Applicant(s)

TONI KOPRA

Examiner

Stephen M Gravini

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MW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Requirements for Information

37 CFR 1.105 states: (a) (1) In the course of examining or treating a matter in a pending or abandoned application filed under 35 U.S.C. 111 or 371 (including a reissue application), in a patent, or in a reexamination proceeding, the examiner or other Office employee may require the submission, from individuals identified under '1.56(c), or any assignee, of such information as may be reasonably necessary to properly examine or treat the matter, for example:

- (I) Commercial databases : The existence of any particularly relevant commercial database known to any of the inventors that could be searched for a particular aspect of the invention.
- (ii) Search : Whether a search of the prior art was made, and if so, what was searched.
- (iii) Related information : A copy of any non-patent literature, published application, or patent (U.S. or foreign), by any of the inventors, that relates to the claimed invention.

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(iv) Information used to draft application : A copy of any non-patent literature, published application, or patent (U.S. or foreign) that was used to draft the application.

(v) Information used in invention process : A copy of any non-patent literature, published application, or patent (U.S. or foreign) that was used in the invention process, such as by designing around or providing a solution to accomplish an invention result.

(vi) Improvements : Where the claimed invention is an improvement, identification of what is being improved.

(vii) In Use : Identification of any use of the claimed invention known to any of the inventors at the time the application was filed notwithstanding the date of the use.

(2) Where an assignee has asserted its right to prosecute pursuant to ' 3.71(a) of this chapter, matters such as paragraphs (a)(1)(I), (iii), and (vii) of this section may also be applied to such assignee.

(3) Any reply that states that the information required to be submitted is unknown and/or is not readily available to the party or parties from which it was requested will be accepted as a complete reply.

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(b) The requirement for information of paragraph (a)(1) of this section may be included in an Office action, or sent separately.

(c) A reply, or a failure to reply, to a requirement for information under this section will be governed by " 1.135 and 1.136.

The Office is requiring submission of information reasonably necessary to properly examine and treat the claimed subject matter under Rule 105. Of particular interest is information used in drafting the present operation including information related to the field of endeavor or business practices used by applicant=s professional business ventures, to show the information used in the invention process, and identification of any use of the claimed invention known to the inventor at the time the application was filed notwithstanding the date of the use. Since the application is filed as a large entity status with Nokia as assignee, along with the fact that the inventor has many pending applications related to the claimed invention and an information disclosure statement was filed with numerous references, it appears that it would be appropriate to require the applicants to provide information necessary to ensure a quality examination may be performed by the Office.

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Specification

The incorporation of essential material in the specification by reference to other applications is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. Specifically, the applicant has incorporated three different applications by reference, without sufficient information for a thorough examination based on the information discussed in the specification. A copy of the relevant portions of the references incorporated or amending the specification such as not to include those incorporated references, would be helpful for a thorough examination and complete application upon publication. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful,

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concrete, and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998). Together, the "technological arts" and "useful, concrete, and tangible result" judicial review standard, result in a comprehensive examination standard wherein the "technological arts" is one element and the "useful, concrete, and tangible result" is another complementary element.

This comprehensive examination standard was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found

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that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within

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the technological arts under the *Toma* test. The Board of Patent Appeals and Interferences (BPAI) have recently acknowledged this dichotomy in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BPAI 2001).

Claims 19-27, 35, and 40 are rejected under 35 U.S.C. 101 because the independently claimed invention does not recite a useful, concrete, and tangible result under *In re Alappat*, 31 USPQ2d 1545 (Fed. Cir. 1994) and *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 47 USPQ2d 1596 (Fed Cir. 1998) such that the claimed invention is within the technological arts under *In re Waldbaum* 173 USPQ 430 (CCPA 1972) wherein the phrase "technological arts" is synonymous with "useful arts" as it appears in Article I, Section 8 of the United States Constitution. In this claim, it is considered that a concrete and tangible result is not recited. Specifically, the recitation of displaying, determining, enabling, communicating or providing, employing or receiving, measuring, and sending is considered not to produce a concrete result because a result cannot be assured or is not reproducible within the technological arts. Furthermore, under *In re Wamerdam*, 33 F.3d 1354; 31 USPQ2d 1754 (Fed. Cir. 1994), the determining, retrieving, and providing recitations are considered intangible because those steps are simply an abstract construct, such as a disembodied data structure and a method of making it, wherein those recitations involve more than a manipulation of an abstract idea and therefore is non-statutory under 35 USC 101. Because the independently claimed invention does not recite a useful, concrete, and tangible result,

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such that it is considered not within technological arts so that it uses technology in a non-trivial matter. Finally under *Ex parte* Bowman, 61 USPQ2d 1665 (Bd. Pat. App. & Inter. 2001) (unpublished but cited for analysis rather than precedent), in which an invention disclosed and claimed directed to a human merely making mental computations and manually plotting results on a paper chart is nothing more than an abstract idea which is not tied to any technological art and is not a useful art as contemplated by the United States Constitution. In this independently claimed invention, the steps of displaying, determining, enabling, communicating or providing, employing or receiving, measuring, and sending are considered nothing more than an abstract idea since it is not tied to any technological art. However in order to consider those claims in light of the prior art, examiner will assume that those claims recite.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 19-27 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Rosin et al. (WO 99/09744).

Claims 28-33 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Aeschlimann et al. (WO 00/29979).

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Claims 34 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Blount et al. (GB 2 330 503).

Claim 35 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Moncrieff (US 5,828,839) or Gerace (US 5,838,396).

Claims 36-40 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Wicks et al. (US 5,949,326).

Claim 41 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Degnbol (WO 00/22860).

Double Patenting

Claims 19-40 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-47 of copending Application No. 09/580,442 or over claims 1-16 of copending Application No. 09/580,443 or over claims 1-13 of copending Application No. 09/981,688. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present application contains the an obvious variation recitation in claim language as applied to the copending application such that patentably equivalent automation devices process functionally equivalent non-functional descriptive material in the same way, using the same method or means, for the same result.

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicant's arguments with respect to claims 19-40 have been considered but are moot in view of the new grounds of rejection.

The rule 105 requirement for information is not proper and maintained. Please see 37 CFR 105.

Conclusion

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Steve Gravini whose telephone number is (703) 308-7570 and electronic transmission / e-mail address is steve.gravini@uspto.gov.

Examiner can normally be contacted Monday through Friday from 6:00 a.m. to 3:30 p.m. **If applicant chooses to send information by e-mail, please be aware that confidentiality of the electronically transmitted message cannot be assured.**

Please see MPEP 502.02. Information may be sent to the Office by facsimile transmission. The Official Fax Numbers for TC-3600 are:

After-final	(703) 872-9327
Official	(703) 872-9306
Non-Official/Draft	(703) 872-9325


STEPHEN GRAVINI
PRIMARY EXAMINER

smg
March 8, 2004